

Robert Walker, Chairman & CEO of Bixby Energy
Testimony before the House Committee on Agriculture
Review of Agriculture's Role in the Renewable Fuels
Market
June 29, 2006

Chairman Goodlatte, Congressman Peterson, and Committee Members, my name is Robert Walker. I am the founder, Chairman, and CEO of Bixby Energy Systems, a Minnesota-based alternative energy company.

Bixby Energy is in the business of making energy using the waste products of the world. In other words, we have figured out how to make engineered fuels from agricultural materials also known as Biomass, municipal solid waste, sewage, wood waste, and even rubber tires. But making these fuels is only the beginning of what we do. We have also developed furnaces and energy systems designed to extract the maximum amount of energy obtainable from these fuels. Last, and equally important, we are building a delivery system nationwide with which to provide our fuels economically and dependably to our customers.

That is a quick overview of what our company does and I realize that this committee's interest is with agriculture's role in the renewable fuels market. So, let me focus for a moment on that part of our business. Biomass, of course, is the generic name for anything that grows and there are more than 10,000 different kinds of biomass materials in the U.S. alone. Everything from grape waste, rice stocks, and olive pits in California, sugar beet waste, turkey litter,

and cranberry waste in the Midwest, and peanut shells, tobacco waste, and cotton gin trash in the south.

And talk about fast renewables, most grow in less than six months, and some like grass grow in as little as a week. Compare that to fossil fuels that take 70 million years to develop and you begin to appreciate the alternative energy opportunity that exists with these materials. When you add the wood waste, municipal solid waste, sewage, and rubber tires, we have an enormous materials base from which to create our fuel products.

To convert these fuels to heat energy, we have developed the MaxFire burn system, a state-of-the-art multi-fuel stove which has an incredible 99.7% combustion efficiency. However, because dry shelled corn has maintained a large surplus for the last 8 to 10 years and it is inexpensive and available everywhere, we have been using it as our primary bio-fuel. Last winter, using corn with about 7,000 Btu's of heat value per pound, thousands of our customers were able to heat their homes very economically. Our stoves are sold in more than 21 states but let me use one example. Customers in our state of Minnesota where winters can be very cold were heating homes 2500 sq. ft. in size for about \$1.50 a day. That's a savings of about 70% over fuel oil or propane.

Alternative energy from agricultural materials is a real business opportunity that can provide jobs in rural America in addition to energy independence. In case you should think that these are the notions of a well meaning but

novice entrepreneur, I should tell you that several years ago I invented a product and founded a company to market it. Today, it is a billion dollar plus market cap, Nasdaq traded company. I know opportunity when I see it and the ability to develop alternative energy in this country is one of the most compelling business opportunities of the future. Is the American consumer interested in energy saving alternative energy products? I can only tell you from my own experience. We introduced the MaxFire stove just 2 years ago to modest sales. Our goal the next year was to do \$3 million in sales. Our fiscal year ended May 31st and we actually posted sales of \$8.3 million. Our goal this coming year which started June 1st is to do an ambitious \$40 million in sales. With only a month into the new season I am pleased to tell you that we already have orders for \$23 million. People are looking for good solutions to their high energy costs!

In two years, we will be offering the Omni System to American consumers. It is designed to be a furnace to heat your home, your hot water heater, your air conditioner, and it will also generate your electricity. All from biomass or other non-fossil fuel sources. It will provide these energy services at 50% less than what consumers are currently paying for them.

Working with the University of Minnesota, Bixby Energy is also commercializing a revolutionary pyrolysis technology developed there that solves a big problem inherent with some agricultural waste. Wheat straw for example, has high energy value of about 9,000 Btu's per

pound but is so light that shipping it to a processing facility is akin to shipping smoke. The freight costs to deliver this material to one of our facilities would eliminate any potential energy savings. Now, we will be able to install these systems in a farmer's barn. He can put his cattle manure, his corn stalks, grass clippings, and that wheat straw into this bin. It will be simple to operate. He simply adds water and flicks a switch. In two hours, using heat derived from the units low energy consuming microwave system, it will turn that 40' trailer of wheat straw into approximately 3½ barrels of bio-crude. It can now be shipped economically in its liquid state for refinement. This is an already proven technology we are commercializing and expect to have in market within 4 years. Imagine the possibilities! This would literally turn every farmer's barn into a miniature oil well!

Now as much as I would like you to believe that Bixby Energy has all the answers to America's energy problems, that simply is not true. Bixby has been able to advance its technology development because it was able to raise more than \$22 million from the private investment community. What I can tell you is that there are literally hundreds, maybe thousands of people and companies in America with great ideas that can be turned into great products with great potential, but they either don't have capital or the other resources necessary to bring them to commercialization. What is critically needed is a system for locating, qualifying, and funding those technological gems that exist out there and are waiting to be discovered.

Great ideas know no political boundaries. They are neither republican nor democrat. President Clinton said, “America needs to do much more to develop energy conservation, alternative energy technologies and we’d eventually create jobs, have more wealth and save the planet, and we’d make ourselves more independent of foreign oil.”

President Bush has said, “This congress must act to encourage conservation, promote technology, build infrastructure and it must act to increase energy production at home so America is less dependant on foreign oil.” The President has turned talk into action by establishing the Advanced Energy Initiative.

America’s energy situation is not a partisan issue. We are all in this together. I can tell you from experience that the biggest impediment to an entrepreneur’s success is undercapitalization. Even at Bixby where we have successfully raised funds, we now need additional investment to support our rapid growth and finish the commercialization of our technologies.

Congress has pending before it HR 4435 and S 2196, a bill that would create an innovative energy research, technology development and deployment program. It’s called ARPA and represents a venture capitalist like approach to research and technology transfer. It has the capacity to find and fund those great technologies out there in America that could help secure our energy independence. Its focus is on “out of the box” private energy research that currently isn’t supported by other

federal programs. It assists those small companies where great ideas are born, but too often falter because of lack of capital. The beauty of this legislation is that it creates a nimble tool within the Department of Energy without the bureaucratic barriers that can be an obstacle to success.

Congress has witnessed the success of this type of model at In-Q-Tel, DARPA, and HSARPA. These agencies constantly meet the challenge of high risk and high pay-off technologies that have not only transformed our military but, improved homeland security and central intelligence.

I urge the support of this legislation and in doing so allow the ARPA staff to act like venture capitalists by going out into the private sector to find the individuals, the struggling start-up businesses, the researchers in universities and if they prove to have compelling, potential solutions to our energy problem, fund them to support their development. Give them the assistance they need that will allow them to provide us with domestically based solutions to insure this country's energy independence.

The President and this congress won't find solutions to the problems that the Advanced Energy Initiative seeks to resolve by sticking to the tired government approaches in place today. Our energy needs and independence goals are bold and require a bold approach. The high risk, high pay-off approach of In-Q-Tel, DARPA, and HSPARA have produced results and yes, there have been failures too, but the highway to success has never been a straight line.

In the meantime there are other steps that can be implemented to stimulate the bio-fuel markets with tax incentives. Today ethanol producers receive a \$.51 federal tax exemption for every gallon of production. Why just ethanol producers? Why not extend that same \$.51 benefit to other liquid bio-fuels or on a per ton basis for pelletized fuels for non-agricultural based fuels produced from trash, recycled oils or grease? Ethanol and alcohol fuels currently receive this exemption through 2010.

Bio-diesel fuels today receive a \$1.00 tax credit through 2008. Why not extend this same income and excise tax credit to agricultural based fuels such as those made from Corn Stover, switch grass or other food stocks or wastes?

In conclusion, Mr. Chairman, I hope that I have imparted to you and your committee members the challenges faced by the entrepreneurial world in bringing innovative technologies to commercialization. I hope that you, this committee and the other members of congress will continue to explore and seek ways in which those of us in the private sector can form partnerships with the federal government to advance our nation's goal of complete energy independence.

Thank you all for your attention.